



Green Infrastructure & Stormwater Management CASE STUDY

Smith Memorial Student Union Plaza

Location: Portland, OR

Client: Portland State University

Design Firm(s): Nevue Ngan Associates; Merryman Barnes Architects; Sisul Engineering

Landscape architect/Project contact: Kevin Robert Perry

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ASLA Chapter: Oregon

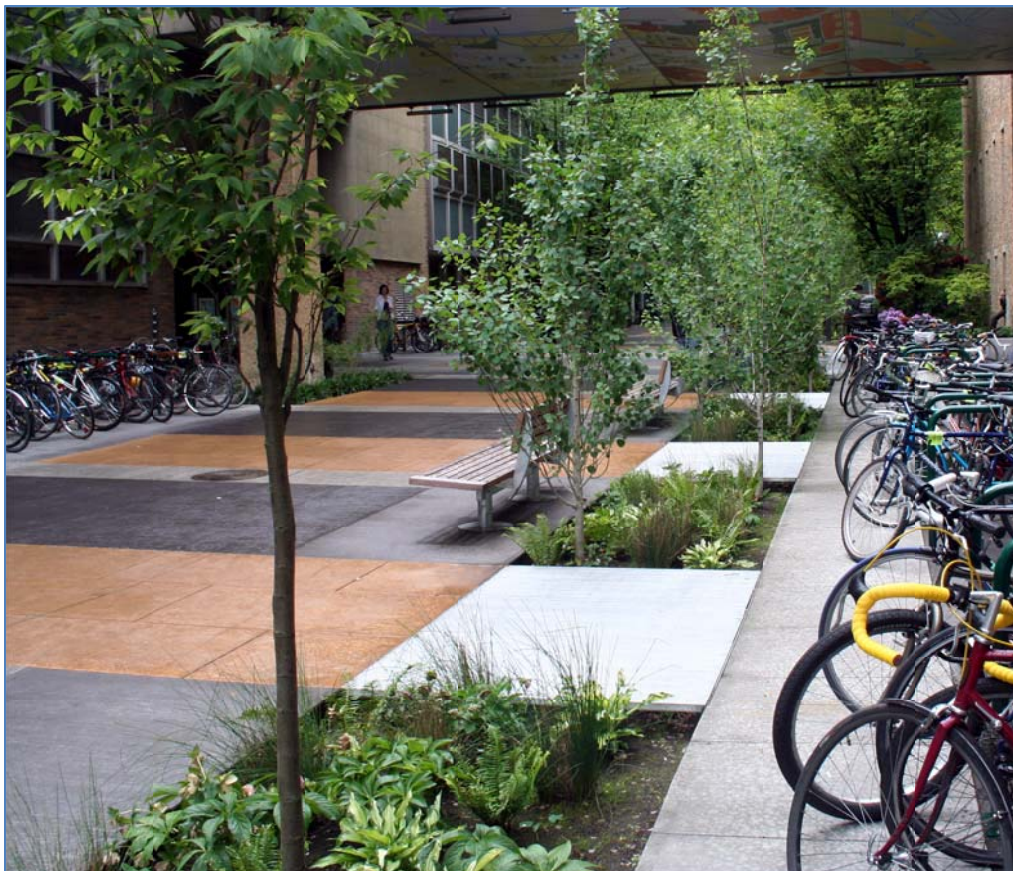


Photo: Kevin Robert Perry, ASLA

Project Specifications

Project Description: This project is the first of nine streetscape blocks identified with the SW Montgomery Green Street Concept Plan to be implemented. The plaza space was retrofitted with several green space elements design to capture and cleanse stormwater runoff. The entire

space was regraded to allow sheet flow runoff to funnel into the prominent 5-foot wide “stormwater spine” running parallel to the building facades. A series of sleek metal grate bridges allows pedestrians to cross over the stormwater spine, but allows water to flow underneath them. Runoff from the University’s skybridge system is also directed into landscaped planters where it can infiltrate into the ground. The plaza’s concept plan also identifies future improvements to potentially have multiple green walls placed along the envelope of the surrounding buildings. The Smith Memorial Student Union Plaza has set the successful precedent for implementing the remaining eight blocks of the SW Montgomery Green Street.

Project Type:

Institutional/education

A retrofit of an existing property

Design features: Bioretention facility, downspout removal, and multiple stormwater planters.**This project was designed to meet the following specific requirements or mandates:**

Local ordinance

Impervious area managed: 5,000 sq/ft to 1 acre**Amount of existing green space/open space conserved or preserved for managing stormwater on site:** less than 5,000 sq/ft**The regulatory environment and regulator was** supportive of the project.**Did the client request that other factors be considered, such as energy savings, usable green space, or property value enhancements?** No.**Cost & Jobs Analysis****Estimated Cost of Stormwater Project:** \$100,000 - \$500,000 (Public funding: Local)**Was a green vs. grey cost analysis performed?** No**Number of jobs created:** Not available**Job hours devoted to project:** Not available

Planning and Design: Not available

Construction: Not available

Annual Maintenance: Not available

Performance Measures

Stormwater reduction performance analysis:

Due to underground structures, this project uses flow-through planters that do not allow for infiltration of stormwater. However, the planter systems are estimated to reduce stormwater flow by at least 50% and they provide good water quality benefits.

Additional Information

Links to images: Pictures can be available by contacting Kevin Robert Perry at 503-239-0600 or email at kevin@nevuengan.com

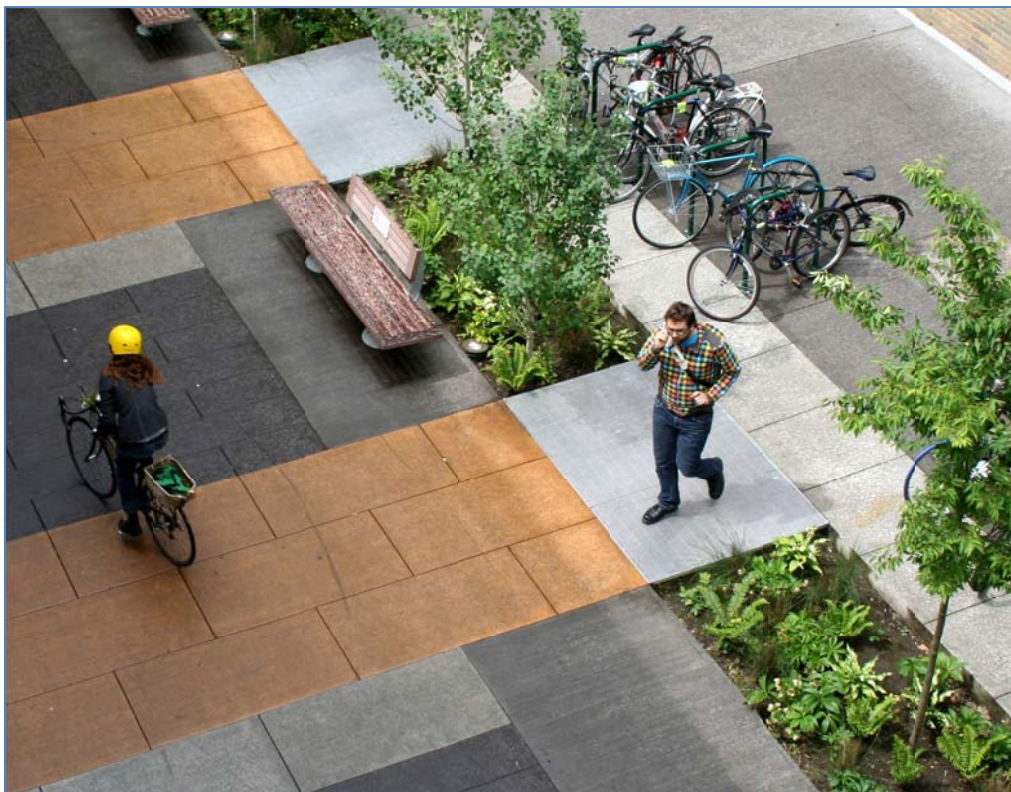


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